

CLAIMS

1. A liquid crystal composition for forming an optically anisotropic film, comprising a polymerizable liquid crystal compound and a hydrolysate of an alkoxy-
5 silane compound.

2. The composition for forming an optically anisotropic film according to claim 1, wherein the hydrolysate of the alkoxy-
10 silane compound contains a siloxane oligomer.

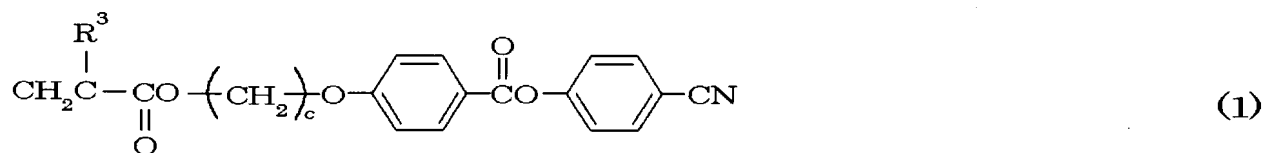
3. The composition for forming an optically anisotropic film according to claim 2, wherein a degree of polymerization of the siloxane oligomer is from 2 to 25.
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4. The composition for forming an optically anisotropic film according to claim 1, wherein the alkoxy-
silane compound is a trialkoxy-
20 silane compound having a functional group.

5. The composition for forming an optically anisotropic film according to claim 1, wherein a functional group is any of vinyl group, epoxy group, (meth)acryloxy group, mercapto group and halogen atom.
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6. The composition for forming an optically anisotropic film according to claim 1, wherein the polymerizable liquid crystal compound contains a rod-shaped polymerizable nematic liquid crystal compound.

7. The composition for forming an optically anisotropic film according to claim 6, wherein the polymerizable liquid crystal compound contains a compound represented by the following general formula (1):



wherein R^3 is hydrogen or a methyl group; and c is an integer from 2 to 12.

8. The composition for forming an optically anisotropic film according to claim 1, wherein the hydrolysate of the alkoxysilane compound is present in an amount of 0.1 to 40 wt%.

9. The composition for forming an optically anisotropic film according to claim 1, wherein the hydrolysate of the alkoxysilane compound is obtained by hydrolyzing one mole of the alkoxysilane compound with

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0.1d to 2.0d mol of water, given that the number of alkoxy groups in a molecule of the alkoxy silane compound is d.

5 10. A method for producing a liquid crystal film composition containing a polymerizable liquid crystal compound and a hydrolysate of an alkoxy silane compound, wherein

 the alkoxy silane compound is hydrolyzed to obtain
10 the hydrolysate, which is then uniformly mixed with the polymerizable liquid crystal compound, or the alkoxy silane compound is first uniformly mixed with the polymerizable liquid crystal compound and the alkoxy silane compound is subsequently hydrolyzed in the mixture.

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 11. The production method according to claim 7, wherein one mole of the alkoxy silane compound is hydrolyzed with 0.1d to 2.0d mol of water, given that the number of alkoxy groups in a molecule of the alkoxy silane
20 compound is d.

 12. An optically anisotropic film comprising a base film and a liquid crystal film obtained by applying to the base film the composition for forming a liquid
25 crystal film according to any of claims 1 to 9 and then

curing the composition, wherein the alignment of the liquid crystal molecules in the liquid crystal film is fixed in a nematic alignment.

5 13. The optically anisotropic film according to claim 12, wherein the nematic alignment is a nematic hybrid alignment or a nematic homeotropic (vertical) alignment.

10 14. A method for producing an optically anisotropic film, comprising applying to a base film the composition for forming a liquid crystal film according to any of claims 1 to 9; causing the polymerizable liquid crystal compound to align in a nematic alignment; and
15 while maintaining the alignment, curing the polymerizable liquid crystal compound to form a liquid crystal film.

 15. A method for producing an optically anisotropic film, comprising applying to a peelable film
20 the composition for forming a liquid crystal film according to any of claims 1 to 9; causing the polymerizable liquid crystal compound to align in a nematic alignment; while maintaining the alignment, curing the polymerizable liquid crystal compound to form a liquid
25 crystal film; and transferring the liquid crystal film

onto a base film using a tackifier or an adhesive.

16. A liquid crystal display having a liquid
crystal panel and the optically anisotropic film according
5 to claim 12 applied on at least one surface of the liquid
crystal panel.